

**Testimony of Jeffrey T. Lawrence**  
**Director of Content Policy and Architecture**  
**Intel Corporation**

**Good Morning Mr. Chairman.** I am Jeff Lawrence, Director of Content Policy and Architecture for Intel Corporation. Intel, the world leader in silicon innovation, develops technologies, products and initiatives to continually advance how people work and live. Intel is based in Santa Clara, California and currently employs approximately 100,000 people around the world, of which about 60% are located in the United States.

As Director of Content Policy and Architecture, I am responsible for all of Intel's many content protection engagements, from public policy and legal matters like the Broadcast Flag, to Cable Plug and Play, and a host of market based initiatives where companies from the IT, CE and content industries come together to find private, market based solutions to advance new consumer experiences in digital media. Some of the initiatives that you may be familiar with include Advanced Access Content System (AACS), for next generation high definition optical media like Blue Ray Disk and High Definition DVD, Digital Transmission Content Protection (DTCP) used to move compressed digital content in a protected home network, and High-bandwidth Digital Content Protection (HDCP) used to protect outputs to new digital displays. I appreciate the opportunity to provide some perspectives on the consumer digital media experience that I anticipate in the next ten to fifteen years.

I share a vision that Intel calls “Digital Home”, where consumers are able to consume the content of their choice any time, any place and in any device.<sup>1</sup> It is a vision based on interoperability among a wide range of intelligent devices, such as PCs, game consoles, home gateways, cell phones, other peripherals, traditional and innovative CE devices, and a host of new innovative devices that are sure to emerge as the engine of innovation churns on. The Digital Home will be a place where consumer choice, flexibility and portability enables consumers ease of use and a multiplicity of compelling new media experiences. Mr. Chairman, it is my belief that we will in fact realize the Digital Home vision in the next decade, and that the market place will resolve the issues that some may perceive as obstacles or threats to that progress. The key is to bring a balanced approach to the digital media ecosystem. I firmly believe that such a balanced approach should include the following fundamental principles:

- Respect for Intellectual Property, Rights holders and Consumer interests
- Reasonably Protected Digital Environment is Necessary Infrastructure For the Digital Future
- A Reasonably Protected Digital Environment Should Provide Consumers Flexibility, Portability and Choice
- Markets, Not Mandates, Stimulate Innovation and Deliver Consumer Value.

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<sup>1</sup> As authorized.

I have been actively engaged in the digital media transition for the past eight years, and Intel has engaged for the better part of a decade. The path of technical innovation with respect to digital media is rapid, and although there are many challenges relating to rights management and content protection, we have seen tremendous progress toward a realization of the digital home goals. With such a wide range of often competing interests, it is sometimes easy to lose sight of the tremendous progress that has been made, that is being made now, and that will continue to be made into the next decade. It is my opinion that in a decade from now, the digital home vision will be realized, and that what are often characterized today as mountainous roadblocks to realization of that effort, will then be forgotten in large measure or simply viewed as small bumps along the digital highway. **Here are just a few of the reasons why I am optimistic that “new media” will continue to evolve in ways that support an enhanced consumer experience while fully protecting the rights of content creators and owners.**

***DVD Video.*** In 1996 the motion picture, consumer electronics and information technology industries got together to develop a compelling new consumer experience known as the DVD. Many said that consumers would reject content protected disks and content protection generally, but they were wrong. The DVD has proved to be the most successful consumer entertainment media of all time. As consumer expectations with respect to DVDs are changing, permitted DVD usage models are also evolving (even if slowly). For example, today, you can stream DVD content in your IP based home network using technologies like DTCP over IP and Windows Media DRM, something

completely unthinkable just a few short years ago, and the industries are exploring ways to enable new uses, such as managed copies and DVD download to disk. While the road may be bumpy with impatience, I'm confident that these new experiences will be delivered in time.

***High Definition Video.*** The CE, IT and content communities have gotten together again to work on next generation high definition optical media, including Blue Ray Disk and High Definition DVD. From the outset, these industries have recognized that consumer flexibility and portability are key factors to meeting the expectations of today's and tomorrow's consumers, and from the outset have developed those specifications and content protection schemes such as AACS with those capabilities in mind.

***Digital Music on Demand.*** In a few short years we have seen a revolution in the way consumers buy and consume music. "Napster", which was once associated with unauthorized peer to peer file sharing, is today a thriving, legitimate, online music business, and nothing needs to be said about Apple's iTunes and the iPod, which have been immensely successful in the marketplace.

***Interoperability.*** There are a growing number of efforts in the market place to address interoperability issues, including for example the Digital Living Network Alliance which currently cites DTCP over IP as the first interoperable digital link for protected content. From beginnings like this, I am confident that the market will deliver a range of interoperability solutions, including those that are device based and those that are

network based. It might take a little time to sort through all of the business model issues associated with interoperability, but I am confident that consumers will ultimately get what they want, and that the market will pass by this bump on the road and never look back.

***Consumer Notice.*** One of the most important factors in establishing an effective and functioning digital market place is consumer choice based on knowledge of the rights and limitations associated with a particular digital offering.

Mr. Chairman, these are just a few of the examples why I am optimistic about the future for consumers in the new digital age. We have come a long way already, and although there is still a long way to go, some of the world's best and brightest are fully engaged to address the problems and issues along the way. Keeping a balanced perspective on where we have come from, where we are going, and the needs and expectations of consumers and other interested parties, will surely make the Digital Home vision a reality.